

THE WORLD RETURNS TO LOS ANGELES

99·FEST-WEST·87
MAY 16-17, 1987

that's 16-17th
NOT 2-3rd!!!!

Toples

LA99^{er} COMPUTER GROUP

VOL 6 NO 3 MARCH 1987 Newsletter

THERE IS SOMETHING FOR
EVERYONE...-MAY 16 & 17

99·FEST-WEST·87

TICKETS ONLY \$5.00
GOOD BOTH DAYS

LOS ANGELES DOWNTOWN

GLENDALÉ-MONTROSE
TOLUNGA-EAGLE ROCK
HIGHLAND ZARK

HOLLYWOOD

SAN FERNANDO VALLEY

WILSHIRE DISTRICT-BEV
HILLS-WLA-WESTWOOD

ORANGE COUNTY

PALOS VERDES-SAN PEDRO
TORRANCE-REDONDO BECH
ROLLING HILLS-CARSON

SEAL BEACH-LONG BEACH

SANTA BARBARA

RIVERSIDE COUNTY

PASADENA-QUARTE

SANTA MONICA
PACIFIC PALISADES

HUNTINGTON PARK
SOUTHE GATE-BELL

SAN BERNARDINO COUNTY

SAN DIEGO

SAN DIMAS-COVINA

DOWNEY-NORWALK
CERRITOS

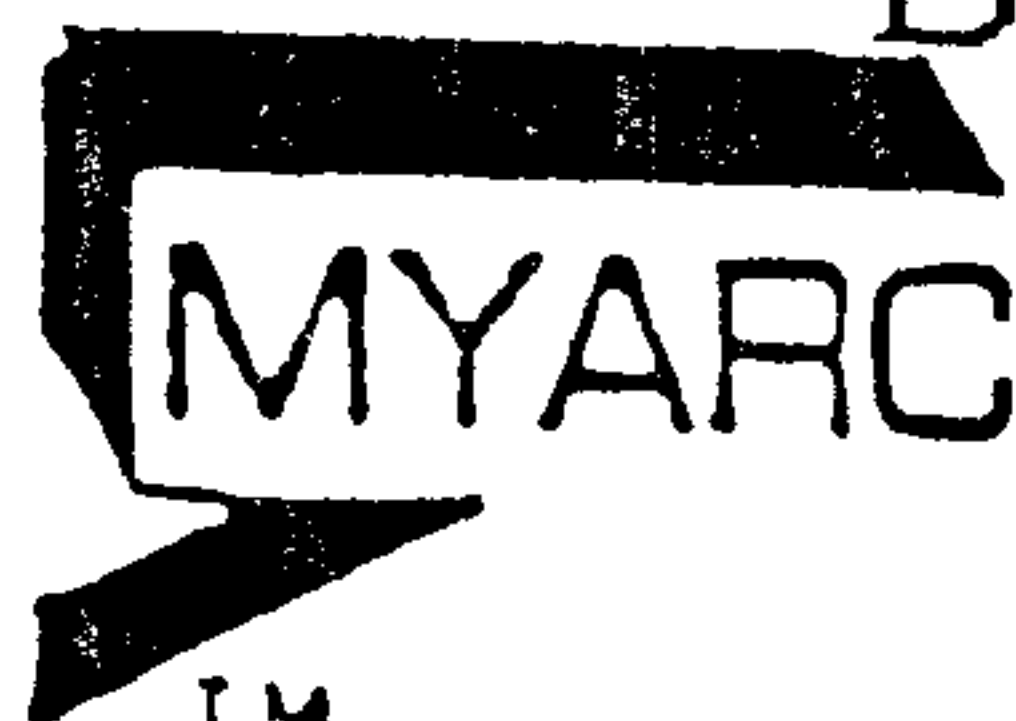
ANTELOPE VALLEY

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Introducing
two more innovative,
market-driven products from

DEMONSTRATIONS



MYARC

T.M.

HARDWARE
SOFTWARE
FAIRWARE
SEMINARS



MYARC 9640

TRITON TURBO XT

T and T: Commentary

GREAT NEWS!!! (first)

9640 is HERE

Les Merryman will demonstrate the Myarc 9640 at our March 25 meeting. What a good opportunity to put a bunch of rumours to rest and see for yourself just what this Computer can do. A good reason for many Southern California Users to attend this meeting. March 25, 7:30 PM at Torrance Public Library conference room, 3831 Torrance Blvd. Guests welcome!

TRITON TURBO XT

We have GREAT expectations that at our April 22 meeting (the FOURTH of FIVE WEDNESDAYS) we will demonstrate the Triton Turbo XT. Clearly for all of the above reasons.

We have long expressed the opinion, that the bottom line is CHOICES!!! Unlike others we do NOT see, or participate in a EAST vs WEST COAST bias. There are as previously mentioned THREE choices. 99/4A, 9640, or Turbo XT. There is no need of HA HA HAS, this is not a case of winners and/or losers, the Community need not fracture, 2-4 page Newsletters may now have more material to print, covering ALL 3 options. The Boston Computer Society is an OUTSTANDING example of COOPERATION rather than ONE-UPSMANSHIP. I recently saw a Diskette of excellent MAC programs at my Son's home, and Lo and Behold! it came from the BCS. Look how well positive forward moving activity goes, why must so many of us waste so much potentially positive time in such negative spoutings based on not yet in hand things?

"Barons MicroComputing Reports"

"Personalized Report for Texas Instruments"

We were regular subscribers to this publication, shortly after "Black Friday" there were no more of these specialized pages. Recently an unsigned, unrequested, version of this "Report" started to appear around the So. California-area. Two User Groups (at least) have printed and/or circulated this amateurish attempt at journalism. Rank journalism at that, misuse of words (formally instead of formerly), lies (GraaKracker withdrawn due to legal pressure from TI), malice against those (MG, MYARC) who have steadfastly refused to sell to a "certain So. Cal. mail order dealer". This ludicrous attempt to deceive the 99/4A community by attempting to snooker them with this pitifully SELF-SERVING ERSATZ charade of a previously legitimately issued publication, by a JESTER without the ability to spell credibility (credability). No wonder he can't spell it, he was NEVER able to BE it. By the way GUESS who besides the apparent author of this "POISON LETTER" is the beneficiary of it, ll come 7 Corcomp.

"Knowing that discretion is the better part of valor, the author wishes to remain anonymous (and alive)". This statement prefaces a down home, over the back fence style yarn. Apparently the writer was VERY aware of the intent to harm and malign, therefore the need to be anonymous (yellow streaked in my opinion). There is nothing wrong with forming an opinion and expressing it, as long as you are capable of identifying with it and be available for

debate. To create a TALL TALE, publishing it anonymously without leaving room for an opposing opinion has only the intent of libelous malice. I can only believe that there are several Newsletter editors with lots of blank space and not too much conscience about what fills it. By the way, there are not a few people around this country that would find the style of writing alone offensive, bet you the writer tells ethnic jokes too.

For a year starting off with CHOICES, it certainly is potentially taking a strange direction. I have never seen such blatant envy masquerading as opinion. People seem to be forcing a Cain and Abel situation just so they can then say "see, I told you so". Well not here, not in this Club and not among its Officers. The loud mouth doomayers are directly responsible for the decline in position of a major network. Classic pointers of addictive personalities (arrogance and omnipotence) have led to the loss of valuable participants in several areas. I hope those whom the shoe fits, make some amends and get this show back on track. Responsible leaders and spokespersons should leave and/or identify personal bias in using mass circulation print and/or electronic media for dissemination of information. T.V. Networks CLEARLY identify COMMENTARY, we are NOT exempt. How can ANYONE for reasons of EGO alone, want to pitch what we have so carefully nurtured. I am not listing Black Hats this time as some are not even aware they are wearing them. Emperors all.

Now back to positive things. We have had many calls and thanks for some of the quick and short, but extremely useful programs Tom Freeman has written over the last couple of years. Many have asked for them ready to run, obviating the need to type them in (but, once the checksum program is in wider use, typing programs will be MUCH easier). Tom has prepared a disk including all of them. He is sending it to Scott Darling for upload to GENIE and other network sources, the Docs are being printed locally and are available for \$5.00 directly from us. The funds going to support the productive endeavors of L.A.99ers. For those of you without access to Networks the Disk is also available from us at \$5.00, \$8.00 total for both, shipping and handling included.

FORTH NOTES #6 is now ready, for you who have been interested in this very interesting and portable language, you know how much work Chock DeMarti has put into this project. The notes are \$2.50 postage included. Beginners Notes has replaced Notes #1, the set now runs Beginners Notes through Notes #6. They are all \$2.50 each or the entire set of 6 for \$12.00. Forth fans out there order yours now.

OOPS, last month we reprinted information regarding TI and parts available for purchase, well there is no doubt we are well read (and red) even TI called waving an embattled flag. The information and some of the phone numbers printed are incorrect. TI is sending us a correction letter which we will print as soon as we receive it. Apologies to all.

AN OPEN LETTER TO TONY AND WILL MCGOVERN

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by Tom Freeman LA 99ers

It was my misfortune recently to come across an article that Tony McGovern had written, reprinted in the Ottawa User Group Newsletter. It truly saddened me to read this drivel that masqueraded as information for the TI community. Let me say right now what I have written before - there is no room within our precious small computer community for such malice and back-biting. There IS room for good programmers and good programs, but why not let each do what he can for the greater good of 99ers, and forget about trying to tear everyone else down. The ONLY reason I am writing a piece which is directly critical of someone else is to reply to the venom I found in Tony's article. I plan to quote liberally from his piece, as well as from a letter that his son Will wrote to a "friend" so that you all can see the hypocrisy involved.

Let's go back a bit. We all know of the various methods programmers have tried to use to distribute, and possibly earn money on, their programs. For instance, we can place programs in Public Domain, forgoing the reimbursement and instead taking pleasure in the recognition we gain. I myself have dashed off quite a number of short ones, which I usually publish in our newsletter, with reprinting encouraged. Then there is the famous (infamous?) "freeware," with most programmers having fairly poor results in terms of money returned. This one depends in part on word of mouth, and certain very good, and some not so good, programs have gotten wide distribution, with SOME money being returned to the programmer. Some very good programs have not received wide distribution because there was no one around to push them. The problem with freeware is that most authors seem to release new versions one after another, each time they think of a new enhancement, or correct a bug that has been found, and most users begin to get very confused. The docs change slightly, and one never knows exactly where one is. Nevertheless some pretty good programs have been distributed this way, one of which is FUDWRITER, written by Tony and Will McGovern, and they even package other programs with it (more about that below). I reviewed it in this newsletter last year, and gave it pretty high marks. I don't plan to use it, because of the authors' "policies."

Finally we get to straight commercial distribution, whether "protected" or not. There is a tendency to have programs in a much more final shape here, and this is a fine philosophical point. Many software producers feel a responsibility to release their programs in a refined form that will not require updates. I believe that the choice of whether or not to protect should be the

author's. You may disagree with it, and no one is forced to buy a program. When I decided to align myself with Craig Miller for release of DISKASSEMBLER, it was with the understanding that it would be in a protected form, and Craig, as a recognized producer of top-quality software, offered such excellent advice on what we call the "user interface" (one of the attributes that makes MG software as good as it is). I worked long and hard making it bug-free, and to my knowledge so far none have been found (there were some requests for enhancements.) In addition I do not know of ANY disks that have been returned as bad - so much for the "backup disk for personal use" argument.

What unfortunately happens with protected programs is that a certain number of "young" people with no morals and even less maturity, consider protection a red flag, requiring them to break it. This would be OK if it were used as a learning tool, and the program remained within their own disk libraries, but strangely enough, the broken copies quickly find their way to all of their friends' libraries, and from there around the world. This happens also with unprotected commercial disks of course, but the challenge doesn't seem to be as great.

It is one thing to break a program for one's own use. It is quite another however to insist on bragging about it publicly while denigrating, with great malice, the programmers involved. Now Tony, to a little bit of quoting. In your article you extol the efforts of your precious boy Will, with his DISKHACKER, and his stupendous abilities at breaking protection on disks that you seem to have but have not bought - QUOTE "Our personal policy is to refuse to buy any program on a protected disk." In commenting on DISKHACKER (which version, Tony? Will we have 9.99 by next year?) you state that QUOTE "it starts off where MG's Advanced Diagnostics leaves off in a trail of deception," Now really, Tony, that is a bit much. It is quite obvious that the program was published without track information that is non standard TI because that was not the purpose of the program, and presumably the author did not wish ANYONE'S protection schemes destroyed. It is THE most useful sector editor that I know, mostly because of its ease of use, which is far and away the best of any such program I have seen. You may prefer another program, Tony, for some other features, but don't tear down DIASS as deceptive, just because YOU don't like it.

And as for your comments on DISKASSEMBLER, I obviously have a bit of a personal interest in this. But your snide comments are unreal. QUOTE "Is the idea original?"

Well, not really because it has been obvious for some while, and such programs are available on other systems. Will and I discussed the idea with no pressing need apparent." Well Tony, I have no knowledge of other systems, and had NOT seen any other disassembler from disk files. It is true that another version in FORTH came out about the same time, but it is not as user friendly (that is what I spent the time on, and I didn't write it for hackers such as yourself). My issue is not to compare the programs - but why don't you let the user decide for himself, or write an honest review having nothing to do with your feelings on protection. I see that you did decide QUOTE "that DKA looked like a worthwhile program to have and use, and that if we used it, it would be from a genuine original.... I wrote to Miller's requesting price quotation on an unprotected version of the program, and received a rather prissy reply.... I'm sure the refusal won't have helped curb piracy one little bit even if Miller's wouldn't trust us to respect their copyright." Prissy, Tony? Really! What did you expect - that the great Tony and Will should get what no one else does? Now let me get to Will's letter to his friend. QUOTE "Tonight someone is bringing over the Miller's Graphics DISASSEMBLER for me to look at. I have been asked to write a program to copy it by people in Australia so I'll get down and see if I can crack it....Next Day: I have now cracked the MB DISASSEMBLER down to 'run program file' format;, so now I can put it on the Funnelwriter disk 1 day is my record Can't wait to see how he protects his next disk." [Underlines by TF]

Well so much for protecting MB's copyright, Tony, if it is on the Funnelwriter disk. Does that make you a liar? Can you swear that you have not given it to a single person who did not buy it? And Will, as far as MB's next disk is concerned, because of you and your kind, there never was one. And by the way, Tony, I do not have QUOTE "share holdings in suppliers of printer paper and ribbons." I imagine that the paper involved has about the same cost as the number of disks one needs for the unpteen versions of Funnelwriter, not to mention the reams of paper needed to print the new docs!

Now, Tony, let's get on to more of your venom (are there are lot of snakes at Funnelweb Fars?) You have plenty of nasty things to say about The Smart Programmer, presumably because of its association with Craig Miller. Why do you bother? In referring to SP's memory maps you state QUOTE "very little detail appeared of relevance to the assembly programmer in the various maps, that couldn't be found out very quickly, and it never really was much more use than the E/A and Technical manuals." Well, let me remind you Tony, there are QUITE a number of users out here who are trying to learn assembly, and find such memory maps helpful, especially when they don't HAVE

the manuals you mention. I wouldn't expect SP to be of use to you and your boy Will, but then what is, outside of your own little world of hackers and cheaters. By the way, you mention The Intern, definitely a book of value, but even it has its problems as it is off by several bytes in quite a number of places.

You then go on to mention the disk/cassette load and transfer utilities and QUOTE "They are about on a par with Will's beginning efforts in this vein," Well, Tony, I am afraid to have to tell you this, but I doubt that SP is out to try and compete with your Will (a nursery rhyme is starting to come back to me, but I won't go into that now). However, if Will would like to write some good articles demonstrating his incredible knowlege, then perhaps someone here (maybe even SP) would like to publish them.

Then after this little snide snippet, you come up with a beautiful oxymoron of sorts. In one sentence, you state QUOTE "I don't have any interest in flogging GramKrackers and always advise people to spend their money on an honest straightforward RAMdisk instead." That's not "flogging?" I myself find the combination of GramKracker and Ramdisk unbeatable, and wouldn't do without EITHER. It certainly DOES do things that your "wonderful" Funnelwriter and a RAMdisk won't do, even with programs that dump GROM only cartridges (have you tried Multiplan yet?)

Finally, Tony, in view of your comments on protected disks, I would like to offer one more bit from Will's letter. In writing of DISKHACKER's imminent (?) release QUOTE "At the moment I am in [sic] two minds about whether to protect (and I mean PROTECT!) the program or just to release it as freeware. What is your opinion? Do you believe that a well programmed and thought out program is worth protecting and marketing for the very small TI market" Well, Tony, do you think your ox might be gored there? Maybe somebody in the world is as smart as Will and could break even his protection. And what about your feeling that nothing protected is worth having anyway? Just depends on who did it, right?

Well, enough of all this. If it seems a bit self-serving for me to be writing a response, it is only because DISKASSEMBLER was the program Tony chose to attack. What I am really defending is the number of HONEST people in the TI market, who I hope are more numerous than the hackers and violaters, although sometimes I'm not so sure. I do hope that this is reprinted by all who have published the McGovern article, since there ARE two sides. What I additionally hope is that Tony, who had some other, truly useful, information in his article would spend his energy and talent in positive ways, rather than just Miller bashing.

RECORDS/PLUS a Review

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by George F. Steffen LA 99ers

Our group has received a copy of Records/Plus by Steve Risner, 1351 Sierra Alta Drive, Tustin, CA 92680. The author claims that it is an extremely versatile, menu driven data base which stores data on its own disk, so only one disk drive is needed without diskette changing. The author claims that the disk will handle up to ten books (files) each of which can have from 1 to 200 pages (records). The program comes with no instructions, merely one demonstration book.

The author calls the program Donation Software rather than the more usual term of Freeware or Fairware. Donors of at least \$5 will receive a set of disk labels and notification of enhancements. For \$10, you will receive the instruction manual also. Donors of more will receive additional items, with \$20 qualifying them to receive enhancements (when written) three months prior to other people.

When the program is run, the first menu offers the option of accessing the books or changing screen colors. When I opted to change screen colors, I was unable to go to the books or return to the main menu. The instruction manual may cover this point. Although the program is completely menu driven, menu selections are not made by entering the number of the choice you desire. Instead, you use the up and down arrow keys to move the cursor to the desired number and then pressing ENTER. The key scan routine

works a little slowly so it can take some significant time to select your choice.

Each page has nine fields of up to 26 characters each. It appears that all information is stored as strings. Records may be sorted on any field. Any fields may be selected for printing lists, but the number of fields on a label is restricted by the label height (a maximum of five fields on a one inch label). Since, on labels, only one field can be printed per line, this means that there is no way to sort by zip code and then print city, state and zip code on the same line.

The author's claim of up to 200 pages on ten books may be true, but it appears to me as if the total number of pages is 200 which may be split between books in any manner desired. A future enhancement will allow larger disk formats to handle up to 50 books and 1000 pages. The author states that, if he receives sufficient donor response, he will put out a utility program for mail merge, moving books and pages between disks, etc.

Since I have not had access to the instruction manual, some of the problems I had with the program may be only my failure to guess how to accomplish what I wish to do. The program is available in the LA 99er Library as Number 1415.

Poor Richard's Peripheral Roundup

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by Dick Dunbar

from MSP 99 Newsletter

MORE ON MYARC 9940: The latest news on the Myarc Gen'evé/9640, as passed along in a conference on Compuserve on December 12, is that first shipments of the new computer, which is being rushed into production, will occur on or about January 15. Not in time for the Christmas season, but soon enough for the TRUE BELIEVERS among us. I have not yet sent in my order, due to economic constraints, but I'm not going to wait much longer. I have already purchased a p-Box to hold it (more later).

MYARC'S OTHER NEW GOODIE: The 9640 isn't the only new thing ready to ship in the middle of January. Their new hard disk controller card will be ready then, too, according to the news nuts. This card will be able to control hard disks with up to 256 MBytes of storage. That's an awful lot of game programs, spreadsheets, or whatever you want to store. Personally, I have a 10 Mbyte hard disk, and can't imagine ever filling it up unless I went hog wild and put everything on it.

I don't do that, however, I keep on the hard disk all the programs and files that I use regularly, and relegate archival and low usage stuff to floppy disks. Even so, I rarely have to crank up my floppies, mostly when I get some new software that needs to be tried out before earning a spot on the hard disk. If I like it and expect to use it a lot, it gets copied to the hard disk. If I CAN'T use it with the hard disk, it will probably go into the trash can.

Even a 5 Mbyte hard disk is well worthwhile - I haven't filled mine nearly that full yet, and you still get the benefit of the much faster access. Hard disks spin 12 times as fast as floppies, and don't have any spin-up delay, since they are always spinning. But I digress from the subject at hand - the new Myarc controller.

This controller replaces the old Myarc Personality card and the Western Digital controller which were required

before to set up a hard disk system for the TI99/4A. It has more capacity, and costs less (around \$299) than the Personality card alone. You now need to add just a bare drive and a cabinet with power supply, and you're in business. The bare drive can be obtained for as little as \$89 (5 Mbyte), \$99 (10 Mbyte half height) if you check out the ads in BYTE or Computer Shopper carefully, and a cabinet/power supply should be obtainable for in that same range. If you install the drive in the P-Box or in a cheaper cabinet with no power supply, you can get a power supply adequate for it for \$30 or less.

By the way, the new controller can be expanded to control floppy disks as well for a bit more money. I don't know how MUCH more money yet, but I would expect it to be reasonable. You would then need only one slot in your P-Box to control both hard and floppy disks, rather than the two that are currently required.

Myarc, Inc.
P.O. Box 140
Basking Ridge, NJ 07920
(201) 766-1700

Rather than leave you hanging, I will also mention the sources of the inexpensive hard disk drives mentioned above. These businesses, whose ads were found in the latest Computer Shopper and BYTE, should be contacted before you order anything, as these items may be in short supply. Keep in mind that this column is being written before Christmas. These sources are:

5 Mbyte full height, make of drive not indicate - \$99:

Western Systems
950 N. Elm St.
Orange, CA 92667
(714) 538-4323

10 Mbyte full height, made by Tandon, model 502 - \$99:

BCE Authorized liquidators
3223 K Street, NW
Department C1
Washington, DC 20007
(202) 944-3900 (Product Info)
(800) 545-7447 (Orders only)

10 Mbyte half height, made by Microscience - \$135:

Timeline, Inc.
1490 W. Artesia Blvd.
Gardena, CA 90247
(213) 217-8912 (Product Info)
(800) 872-8878 (Orders only)

GRAM/RAM CARD REVISITED: Wouldn't you know it! The last Poor Richard column was barely out the door when I began having problems with my GRAM/RAM card. After having raved about having had NO problems with Extended Basic executed

from the GRC, suddenly I began having problems with it.

The problems were of such a nature that I wasn't sure it was the GRC at all. In fact, at one point I swapped consoles, replacing my old one with a newer backup console that I had. Lo an behold, the problems went away - for a while. Then they came back again, and have now become consistent and constant, to the point where I am now using my old Extended Basic cartridge until my GRC is repaired or replaced.

I think the problem is a component that is gradually going bad, which caused problems earlier on my old, well-used console than on the newer one. I will report on my luck in getting this resolved as it progresses. I hope Rye Data (from whom I purchased the card) resolves the situation quickly. I miss it.

SPEAKING OF RYTE DATA: Rye Data has a number of interesting goodies in their latest catalog. The following items are all made by a German company called ATRONIC:

CPS 99 - a self-contained expansion system with 32K memory, RS232 port for printers and modems, a dsdd disk controller and power and space for two half height disk drives. The price is given as \$589.95 Canadian, or about \$436 US (if I did the arithmetic correctly).

MegaRam - a full Megabyte of memory expansion - 1024K of memory - useable as Randisk, or as ordinary memory using bank switching techniques from assembly language programs. This unit is not a P-Box card, but a stand alone unit, since it requires console address line access not available from within the P-Box. Its not cheap - the price tag is \$575.95 US.

DSDD 4 drive disk controller with 32K memory expansion included the the same P/Box card - \$245.95 US.

RS232 with two serial ports and one parallel port, plus 32K memory expansion on the same P-Box card. The parallel port is output only, not bi-directional like the TI card, but not many use it for input anyway. Priced at \$175.95 US.

In addition to the Atronic devices, Rye Data is also working on a Peripheral Expansion box for those who would like to expand using regular P-Box cards, but can't find a P-Box in which to put them. This unit, called the 99AT Expansion, looks like an IBM PC processing unit, and will supposedly hold five expansion cards and four disk drives. This appears to be in the "real soon now" stage (to steal a phrase from Jerry Pournelle), and is priced at about \$155 US.

Right now, you can still find genuine TI P-Boxes for less than that if you look around. I just bought a brand new one for \$115, and I know I could have done better. I just go too impatient. The same source also had a used one for

\$95. However, if the Gen'ev/9640 is as successful as everybody hopes it will be, there won't be enough of the genuine article to go around, so something like this will be needed. And the price is not bad, if they can hold to it.

Ryte Data/Millennium Computers
219 Mountain Street
Haliburton, Ontario K0M 1S0
Canada

EARLY WARNING WRAP UP: Next month, if there are no overwhelming new developments in the world of TI peripherals, and if I can remember any of it, I will go

TIPS 'n Thoughts =====

by Tom Fairbairn

from MSP 99 Newsletter

In recent months I have put a fair amount of notice into the bulletin boards about the problems I have encountered with my Extended basic cartridge. It appeared as though the cartridge was using its mind in stages and was causing my work diskettes to become scrambled upon occasion.

It got to the point that no amount of contact cleaning, machine disassembly, or any other of the often-discussed fixes had any effect. At that point, I launched some comment or other at one of the user group meetings, and accepted the concept that the cartridge was defunct.

I continued to use the system, however, under Funnelwriter. This allowed me the full use of the editor and formatter from TI-Writer, my DM 1000 facilities, my terminal program (Mass Transfer), and most of the other capabilities under the Editor/Assembler cartridge and I was happy with that.

This was where matters stood for several months. Everything was working smoothly, it appeared, and I was looking for a reasonably priced (read: cheap!!) replacement for the old XB cartridge.

However, last month the kids started to complain that some of the game cartridges were doing strange things to them, including the now famous disk scrambling; my eldest son and prize programmer Ed lost a whole disk of work he was trying to do against a deadline, and now we were back to the original problem.

I tried all the old nostrums. I cleaned all the connectors, reseated cards in the expansion box, diddled with expansion connector, all to no avail.

The problems just continued and got progressively more severe. At my wit's end, (EN: Sic - apparently the

back to history and trace some of the major milestones (and a few of the millstones) of magnetic mass storage technology (mostly - but not exclusively - disk storage) as it has progressed since its introduction by IBM in the mid/late 1950s. Many of you weren't even born then, but I was there and am prepared to bore you silly with the story of it.

If you enjoy that, in later columns I just may go on to trace some of the developments in computers in general from the mid/late 1950s to the present time. Let me know if this sounds like it might be interesting to you. Keep those TI99/4As churning', and I'll see you next month.

author is twice a half-wit.) I got to the point where I was ready to scrap the console and replace it.

Then I got to thinking.

I wondered what would happen if, for some strange reason, the power supply had gotten "dirty" or the voltages were low. Since I had gotten some of the "new" TI supplies from Radio Shack a while ago. I thought I would just drop one into my console and see what would happen. The "new" supply lacks the LED indicator (but if the power is on my monitor is, too, so no problem), and it has two wires from the plug instead of three. It also lacks the ferrite power line filters that are on the original supply.

Being that I've been a technician more years than I've been a writer, working on my own machine is no big deal to me. I grabbed one of the new supplies, moved the ferrites from the old supply cables to the new one, and installed the new one in the console.

After several hours of operation, I came to the conclusion that the new supply was indeed the answer to the problems we had seen. Since the new supply has gone in, the only problems we have seen have been due either to (one case) an excessively dirty edge connector in the game cartridge, or because the expansion cable gets shaken loose when the kids get too violent with game entries from the keyboard.

Now the kicker: just for grins, I located the "defective" Extended Basic cartridge and plugged it in. I ran that puppy for six straight hours of pounding keys, and since then have put many hours on it AND IT HAS NOT ONCE FAILED!! I have not had one scrambled disk, nor a single false reset, not even one lockup under XB since the new power supply went into the machine.

Now, I have not made any investigation of the actual failure in the old supply, so I really can't say with any certainty what was wrong. Nor can I rightly say if the XB failure was due directly to dirty power, poor regulation, bad voltage or what. Furthermore, I am not going to waste my time doing so, as the swap proved the old supply was bad and that is the name of the game.

But there are two aspects to this that I can speculate on.

First, the old supplies are called "linear regulator" supplies. They regulate the power by "losing" part of the output voltage in the regulators as heat. The new supplies use "switching regulators" that operate by turning the supply on and off very rapidly to control the power voltages being delivered. A switcher is much more efficient in the way it uses power, is more compact, and produces much less heat. The latter is very noticeable on the TI console. The coffee warmer on the right side now is just slightly warm to the touch. Well designed switcher supplies (which this one is!!) regulate very closely and do not have much in the way of trash in the output power.

By contrast, linear supplies waste a great deal of the input power in the regulators as heat. This can affect not only the stability of the supply itself if not well ventilated (and the TI console is not) but also affect other parts around it. Consider that the connector contacts in the cartridge slot are tin plated on one side, and are subject to considerable heat from the supply. Since tin expands much more than phosphor-bronze, which is the springy part of the contacts, I suspect the contacts may actually bend AWAY from the cartridge blades in operation. If they bend enough to break contact, all manner of very strange effects may come into play. Moreover, the head on the chips and cards within the cartridge certainly does neither any good. So I believe the heat reduction has a very positive effect in this area.

I also suspect that the regulators in the old supply were either putting noise ("trash") on the outputs or that the voltages were dropping because of the effects of heat on the regulating components. There are parts of the old supply you dare not touch in operation lest you get a nasty burn. The regulating components are not made to run indefinitely at these high temperatures. I could very well believe the old supply suffered many ills from this source. I suspect that any drop or hash in the supply voltages could cause any or all of the ills I have experienced.

In any event, I would strongly suggest that if you are having problems with unexplained resets and in communicating with your expansion devices, you try replacing the supply. Although Radio Shack appears to be out of them, I still see the TI switching supplies

advertised in the "Computer Shopper" (our own Glenn Thompson is a regular columnist in that terrific magazine!!) for under \$6.00. The new supply uses the same wall transformer you have now, and fits the same holes and mountings in the black and silver or the white consoles.

If you are afraid of trying to do this fix yourself, bring your console and the new supply to a users' group meeting and I'll be happy to change it for you. Be sure to let me know ahead of time, though, so I can have my tools at the meeting. Also notice that you have to provide the new supply; I don't have any of these for sale.

Any of you who are having ongoing problems with cartridges or disks despite cleaning the cartridge connectors may be candidates for this fix. If you do this swap, let me know how it works for you. I would like to gather all the statistics I can on it for further information. You can reach me via the club post box or call me at home. My phone number is (612) 866-8295.

I believe one of the main points to consider here is whether suspected bad cartridges, especially those that represent a heavy load on the power supply, may in fact be due to power supply problems rather than the cartridge itself. The fact that the Extended Basic cartridge has, in my case, worked with no problems since the supply has been changed leads me to think that at least some of the "bad" cartridges sent back to TI may actually be a symptom of a bad supply. I am now very suspicious that "failing modules" are really a failure mode of the old-style power supplies. Of a certainty, replacing a suspicious or positively bad supply for about 6.00 beats replacing a cartridge for four or more times the price, especially if there is not guarantee that the new cartridge will work better than the one replaced.

-TOM-

Editor's Note (MSP 99 Newsletter):

Well, what do you think? Could the trusty power supply be the elusive lock-up culprit? Will Extended Basics innocence be proven at last? I'd like to know your opinion. I'd really like to hear from anyone else that tries this and see what results they arrive at. Let's hear some feedback on this one, we might really be onto something here.

Editor's Note (Topics).

Clearly, Tom Fairbairn will not be at the Los Angeles meeting to assist. Do we have a volunteer to check the theory out?

From the Disk of =====

Mike Dodd LA 99ers

DM1000... has an annoying little bug if you happen to own a CorComp disk controller. When M1000 formats disks in double density, it puts 16 sectors/track on the header, even though it formats 18 sector/track. Which is all very fine and well if you keep it on a CorComp controller, for the reason that the CorComp controller never even heard of 16 sectors, so it doesn't care what the header says. HOWEVER, if you send the disk to someone who has a MYARC disk controller, then the MYARC controller looks at the header and sees "16 sectors per track". So it reads the disk based on that information. But it's 18 sectors per track! So, the MYARC card reports a blank disk. After having several people complain about my blank disks, I found a fix for DM1000. For V3.5, edit the first sector of the MGR1 file. At byte 216, you should see (in hex) 10 00 02 D0 00 5A. Change the 10 to 12. Write the sector back out to disk, and never worry about it again. If you are using another version of M1000 that has the same problem (I don't know if any others do), search for 10 00 02 D0 00 5A. It should be very close to the beginning.

GRAM Kracker: I'm working on a GRAM Kracker disk, to contain modifications to XBasic and /A. If you have ANY changes you would like to see made to either cartridge, please let me know and I'll see if I can write it. I do not promise that I will write everything people suggest, but I'll do my best.

HCI... revisited. When they first sent out HCI volume 1, I sent a letter requesting a refund. No answer. I wrote the D.A. Within two weeks, HCI wrote back and said if I mailed back HCI and the disk, they would refund my money - \$1.05. Odd, since by my calculations, they owe me \$36.75. They were charging me for "premium media issues", which I assume was their On Disk. Trouble is, I've never gotten nor requested On Disk. On October 12, 1986, I wrote a letter to both HCI and the DA explaining the mistake and asking for my money back. No answer. On February 14, 1987, I wrote a letter to both HCI and the DA asking about my letter. It is now March 2. Still no answer. I'm going to write them another letter, but it's not looking too good.

Video Chess Filename Entry =====

Mike Dodd LA 99ers

The Video Chess cartridge's lack of ability to save to disk can often be frustrating. The following modification will allow you to specify any filename, disk, RAM-disk, or cassette. It requires a GRAM Kracker.

Load the Video Chess module into the BK. Now enter the memory editor. Select GRAM/BROM with FCTN 1 and hex code with FCTN =. Enter search mode with FCTN 5. Search between 6000 and 7000 for 31 00 0F AB EB 60 60. When you find it, exit the search with FCTN 5, get into the memory window with FCTN 9, and type 06 78 00 05 72 65 (be sure to enable bank 1). Now press FCTN 5 to search. Leave the addresses alone, and search for the same string, by putting the cursor on the last "0" in the last "60", and pressing ENTER. Press FCTN 5 to leave the search, FCTN 9 and ENTER to home the cursor in the memory window, and type 06 78 00 05 72 FC. Press FCTN 9 and change the address field (upper left corner) to 7000. Press FCTN 9

and ENTER. Now type the following data (don't type the addresses - they're just a guide).

```
g7000 31 00 0F AB EB 60 60 00 FC 20 FE 00
g700C FF 02 00 46 49 4C 45 4E 41 4D 45 3F
g7018 A0 FF 02 5F 20 FB BF 00 00 22 BE B0
g7024 00 4A 03 58 22 D6 75 0D 78 3E D6 75
g7030 07 78 00 A2 75 20 BC B0 00 75 91 00
g703C 58 22 BD 02 00 A7 02 00 22 78 00 34
g7048 02 AB F2 A0 22 BC AB F1 03 BF 00 0B
g7054 F2 A6 B0 00 20 91 00 93 02 58 55 00
```

Now enable the write protect, press CTRL = to leave the memory editor, and save your modified Video Chess cartridge to disk. Now, whenever you tell Video Chess to save or load a file, it will ask for a filename. Press FCTN 3 to erase the filename if you make a mistake. None of the other FCTN keys work.

Did you know that...?

by Chick De Marti



DISK DIRECTORY

Have you ever wished you could add a disk cataloging routine into a program that you are working on? Well now you can! This short routine will quickly catalog a disk and display the listing along with the sectors used and free. It is written in Extended Basic but can easily be converted to Basic.

NOTE: It might be best to resequence it and use it as a subroutine.

```
1 @=1 :: OPEN #@:"DSK1.",INPUT,
  RELATIVE,INTERNAL :: INPUT #@:
  F$,E,E,F :: DISPLAY AT(2,@)ERA
  SE ALL:F$:"FREE=";F;"USED=";E-F
  :: R=5 :: C=@
2 FOR H=@ TO 127 :: INPUT #@:F$
  ,D,E,F :: DISPLAY AT(R,C):F$ ::
  R=R+1 :: IF ABS(D)=0 THEN CLOSE
  #@ :: END
3 IF R<24 THEN 4 :: C=16 :: R=5
4 NEXT H
```

<*><*><*><*><*><*><*>

INVERSE VIDIO

```
100 CALL CLEAR :: CALL SCREEN(5)
110 ! The next line is the heart
  of the routine and is all that
  is needed.
120 FOR I=65 TO 90 :: CALL CHARPAT
  (I,A$):: CALL CHAR(I+32,A$) ::
  NEXT I
130 FOR I=1 TO 8 :: CALL COLOR(I,
  16,5):: NEXT I
140 FOR I=9 TO 12 :: CALL COLOR(I,
  5,16):: NEXT I
150 A$="INVERSE VIDIO"
160 B$="inverse vidio"
170 DISPLAY AT(11,7):A$ :: FOR I=1
  TO 50 :: NEXT I :: DISPLAY AT(
  11,7):B$ :: FOR I=1 TO 50 ::
  NEXT I :: GOTO 170
```

(DISK DIRECTORY and INVERSE VIDIO comes to you through the courtesy the MPS 99 newsletter.)

<*><*><*><*><*><*><*>

NEW WRINKLE

Found this in the program "SIMPLIST" by the Funnelweb Family. A line with a new wrinkle...

340 DISPLAY ERASE ALL :: etc.

<*><*><*><*><*><*><*>

```
10 ! *** SURPRISE - SURPRISE ***
20 ! By Chick De Marti
30 !
40 !
50 ! GUESS WHAT THIS PROGRAM DOES
60 ! >BEFORE< YOU RUN IT !
70 !
80 CALL CLEAR
90 A$="HERE" :: B$="THERE" :: C$="WHERE"
100 PRINT A$:: PRINT B$:: PRINT C$;
110 PRINT
120 PRINT A$,:: PRINT B$,:: PRINT C$,
130 PRINT :: REM *** A BLANK LINE ***
140 PRINT A$ :: PRINT B$ :: PRINT C$
```

<*><*><*><*><*><*><*>

```
1 ! Here's one for you
2 ! mathematicians...
3 !
4 ! Figure the answers
5 ! on paper FIRST!
6 !
10 CALL CLEAR
11 X=1 :: Y=2 :: Z=3
12 A=X<Z
13 B=Y>Z
14 C=Z>X
15 PRINT "A=A=";A+A
16 PRINT "A+B=";A+B
17 PRINT "A+B+C=";A+B+C
```

<*><*><*><*><*><*><*>

>>>>> A NEW CALL LOAD <<<<<

Taken from: Aaron W. West -Boston Computer Society

Has your computer ever locked up while saving an Editor Assembler file? If it does lock up, in TI BASIC type in:

CALL LLOAD(-31860,96,41) to return to Ed/Assm without reinitializing the memory expansion. You can also use this to rerun a program you loaded into Ed/Assm. [NOTE: this will only work

with an Ed/Assm Cartridge located at GROM address >6000. This will not work with a moved Ed/Assm using GRAM Kracker]

MODULATOR MODIFICATION

RQM - DECEMBER, 1986

The widely available RF modulator (\$14 at Tex Corp, \$5 at Radio Shack, and 50c at local garage sales) has a 300-ohm output from a center-tapped impedance matching transformer. This transformer can provide a 75-ohm source, if you want to use coax in place of the twinlead. Just pry the top and bottom covers off; unsolder and remove the twinlead stub; solder in a coax stub with connector (center lead to one of the holes marked RF OUT, shield to ground); and your're in business. If you want to be fancy, use a

chassis-mount connector.

If you use a monitor, as well as a TV, you might want to consider something just a little more elaborate. The Transfer/Isolation switch can be rewired to provide either modulated RF or composite video. (Audio and video are routed through RCA type jacks mounted where the tv-antenna-in connector used to be.)

This mod requires circuit board surgery via Xacto knife and soldering iron. Keep in mind that the TI switch is coupled to the power switch, and the power is off in the TV ANTENNA position.

!!! WELL I'LL BE !!!

It may not have been the first time that a mysterious failure was blamed on a "bug", but Grace Murry Hopper, one of the first computer programmers and a Navy captain, says she was there when the term was first applied to a computer failure - and she has the bug to prove it. At Harvard one summer night in 1945, Hopper says, she and her associates were working on a "Granddaddy" of today's computers, the Mark II. "Things were going badly - something was wrong in one of the relays of the long, glass-encountered computer" says Hopper. "Finally someone located the trouble spot and, using ordinary tweezers, removed the problem, a moth. From then on when anything went wrong with a computer, we said it had bugs in it."

The historic moth remains are taped to a page of Hopper's 1945 logbook, and a picture of the bug appeared in the July 1981 issue of the "Annals of the History of Computing."

(Thanx TI Puget Sound 99ers ...)

32_K__MAGIC

Your typing something using TI-Writer on your Funnellweb Farm Disk...in the middle of it you think of another project you had planned to do. You SF (SaveFile), get out of TI-Writer using option 6, (Q)uit and find yourself in X-Basic. You open the disk gate (so you don't auto-load Funnellweb), now you change a disk...delete a file, or use the printer for some small project, and your ready to get back to your letter writing. Now you reload Funnellweb...reload TI-Writer go to the Editor and type in "LF" (to LoadFile) and just like MAGIC...there is the name of your program...still in memory (32 K MAGIC).

<*><*><*><*><*><*><*>

ARCHIVER_BUG

Barry Traver is the publisher of the Genial TRAVELER Disk-a-zine and author of ARCHIVER, a popular program used to pack a number of files inot one big package, in order to maintain integrity when uploading/downloading to BBS's. In the latest issue of G-T, he announced a minor bug found in the display of files sizes. This bug did not affect the operation of the program, but simply gave some "interesting numbers". Change line 635 to :

635 KK=(Z-1)*(100*INT((KK-1)/50)+1)+2-Z

<*><*><*><*><*><*><*>

4__QUICKIES__4_U

[These are "THANX" to John Johnson of the CV 99ers.]

(1) Using CALL MOTION on a nonexisting sprite will make that sprite exist!

(2) For mor detail and colors in pictures use stationary sprites on top of the picture, or even ON each other!

(3) The edge of objects on a ptcture can be softened by calling colors that are close to the object's color. Exam.

WHITE = grey, DARK RED = light red

(4) For CALL SOUND major and minor chords, where "T"=time and "N"=note frequency, use:

MAJOR=(T,N,1,N/1.19,5,N/1.5,5)

MINOR=(T,N,1,N/1.14,5,N/1.5,5)

Well, I'm out of coffee...see you next month.

Chick

< * TELE-COMMUNICATION * >

TIPS AND INFORMATION

(Thanks to NORTH JERSEY TI-User Group)

Did you ever want to use your TI-Writer for sending information via a modem? The Magnetic Users Group, North Andover, MA has discover the way to do it.

SENDING Party:

Compose text as usual in TI-Writer. However when it comes time to save it on disk, use PRINT FILE with no characters.

PF C DSK2.README

Exit the EDITOR section of TI-Writer and enter the FORMAT section.

FILENAME: DSK2.README
DEVICE NAME: RS232.LF
USE MAILING LIST: N
WHAT PAGE(S)? (ALL)
NUMBER OF COPIES ? 1
PAUSE AT END OF PAGE? N

CHECK -- To be sure that the RECEIVING PATY IS READY before you toggle the SENDING MODEM ON. When everything is read, hit "ENTER."

RECEIVING Party:

Enters the EDITOR section of TI-Writer and prepares to LOAD FILES.

LF RS232.LF

When the sending party is ready to send, wait until you hear the squeal of his modem, then toggle the receiving modem on and hit the ENTER button. You won't see anything on your screen, but the lights on your expansion box will flicker. Then if everything has been done correctly, the file will suddenly appear. Then S(ave)F(ile) to your own disk in the usual manner.

If you don't get your timing correct, you may lose part or all of line one. You can recover most of it with "OOPS" (Control1), but it is easier to simply be sure that your text starts with one or two blank lines.

WARNING !...WARNING !

This message was placed on the local BBSs by Danny Nelson, a new addition to the LA 99ers.

* THERE IS A NEW PIECE OF LEGISLATION THAT COULD SCREW UP MODEM ACCESS BY COSTING US MUCH MORE TO MAKE A CALL WITH A MODEM. THIS LEGISLATION IS CALLED, 'COMPUTER INQUIRY III'. WE SHOULD ALL WRITE TO THE HONERABLE MARK FOWLER, CHAIRMAN OF THE FCC, WASHINGTON, D.C. 20554, AND TELL HIM IN NO UNCERTAIN TERMS THAT THIS REGULATION MUST NOT BE ENACTED!

ALSO, PUT THIS MESSAGE ON EVERY BBS THAT YOU CALL AND INCLUDE THE NAME AND ADDRESS. EVERYONE MUST WRITE..."

```

100 !*****
110 !
120 ! TI-99/4A KEYBOARD TUTOR
130 !
140 ! BY CURTIS BORDERS
150 ! DECEMBER 1986
160 !
170 ! EXTENDED BASIC
180 !
190 !*****
200 FC=2 :: BC=4
210 GOSUB 640
220 CALL CLEAR
230 DISPLAY AT(2,1):" TI-99/4A KEYBOARD TUTOR"
240 CALL CHAR(97,"1010101010101010")!a
250 CALL CHAR(98,"FF10101010101010")!b
260 CALL CHAR(99,"FF00000000000000")!c
270 CALL CHAR(100,"1F10101010101010")!d
280 CALL CHAR(101,"F010101010101010")!e
290 CALL CHAR(102,"101010101010101F")!f
300 CALL CHAR(103,"00000000000000FF")!g
310 CALL CHAR(104,"10101010101010FO")!h
320 CALL CHAR(105,"10101010101010FF")!i
330 DISPLAY AT(5,1):" dcbcbcbcbcbcbcbcbcbcbce"
340 DISPLAY AT(6,1):" a1a2a3a4a5a6a7a8a9a0a=a"
350 DISPLAY AT(7,1):" fgigigigigigigigigigigigh"
360 DISPLAY AT(8,1):" a a a a a a a a a a a e"
370 DISPLAY AT(9,1):" aQaWaEaRaTaYaUaIaOaPa/a"
380 DISPLAY AT(10,1):" f a a a a a a a a a a a"
390 DISPLAY AT(11,1):" bcbcbcbcbcbcbcbcbcbcbce"
400 DISPLAY AT(12,1):" aAaSaDaFaGaHaJaKaLa;a a"
410 DISPLAY AT(13,1):" fgigigigigigigigigigigigh"
420 DISPLAY AT(14,1):" d a a a a a a a a a a a"
430 DISPLAY AT(15,1):" a aZaXaCaVaBaNaMa,a.a a"
440 DISPLAY AT(16,1):" fgigigigigigigigigigigigh"
450 DISPLAY AT(17,1):" a a a a a a a a a a a"
460 DISPLAY AT(18,1):" a a a PRESS A KEY a a"
470 DISPLAY AT(19,1):" fgigiggggggggggggggggigh"
480 DISPLAY AT(21,1):"FORE COLOR BACK COLOR"
490 DISPLAY AT(23,1):"FCTN REDO FCTN BACK"
500 CALL MAGNIFY(2)
510 CALL KEY(D,K,S):: IF S=0 THEN 510
520 IF K=32 THEN GOSUB 600 :: GOTO 510
530 IF K=13 THEN GOSUB 610 :: GOTO 510
540 IF K=6 THEN FC=FC+1 :: GOSUB 620 :: GOTO 510
550 IF K=15 THEN BC=BC+1 :: GOSUB 620 :: GOTO 510
560 DISPLAY AT(22,11):"
570 CALL CHARPAT(K,A$)
580 CALL SPRITE(#1,K,2,165,115,0,0)
590 GOTO 510
600 CALL DELSPRITE(#1):: DISPLAY AT(22,12):"SPACE " :: RETURN
610 CALL DELSPRITE(#1):: DISPLAY AT(22,12):"ENTER " :: RETURN
620 IF FC>16 THEN FC=1
630 IF BC>16 THEN BC=1
640 FOR I=1 TO 14 :: CALL COLOR(I,FC,BC):: NEXT I
650 CALL SCREEN(BC)
660 RETURN
670 END

```





We recently started to exchange newsletters with the "TINS" Newsletter. I was happy to find some information on FORTH in several of their issues. I'd like to share one of the articles with you today...Chick De Marti

SMART VARIABLES FOR FORTH

by
Dennis Misener

Welcome again to the wonderful world of FORTH. This month's column consists of two parts. The first part is dedicated to those of you who are tired of typing all those "!" and "@". The second part consists of a simple (and I do mean SIMPLE) turtle graphics type demo.

Smart variables can make FORTH code more readable by eliminating those nasty "@!" and "!" characters. The following code is presented without a line by line description in order to keep the column length down. It may be used without understanding it but is worth a moment's study to appreciate the power of FORTH's extensibility.

```

O VARIABLE ->?

: ON -1 SWAP ! ;
: OFF 0 SWAP ! ;

: ->
  ->? ON ; IMMEDIATE

: VAR
  <BUILDS
  , IMMEDIATE
DOES>
  ->? @
  IF ( setting contents )
    STATE @
    IF ( compiling )
      COMPILE LIT , COMPILE !
    ELSE
      !
    ENDIF
  ->? OFF

```

```

ELSE ( getting contents )
  STATE @
  IF ( compiling )
    COMPILE LIT , COMPILE @
  ELSE
    @
  ENDIF
ENDIF ;

```

To use a smart variable's contents simply use the variable name. To set such variables, use the -> construct. An example of its usage is the creation of a little box whose only purpose in life is to travel in a straight line leaving an imprint of itself as it goes. When it bumps into its own "trail", it turns right and continues on until there is nowhere left to go. Although this is not one of the worlds greatest FORTH applications, it might serve as a simple example of FORTH code for those of you who are trying to pick up the language.

We start off by creating a couple of variables to record the current position and direction of our travelling box. We will use our new smart variables of course.

```

O VAR ROW    O VAR +ROW
O VAR COL    O VAR +COL

```

We must also record the number of consecutive right turns the box has made to determine when a dead-end has been encountered (i.e. can't travel in any of the four possible directions).

```

O VAR TURNS ( # consecutive turns )

```

Using WYCOVE forth, the character associated with the ASCII value 31 just happens to be a "box". (How convenient!!)

```

31 CONSTANT BOX

```

(Continued next page)

(Continued)

The following nasty section of code keeps the box from falling off the end of the screen. When the little critter crawls off he just pops up on the opposite side.

```
: MODULUS ( n\modulus - n )
  >R DUP 0<
  IF
    MINUS R MOD R SWAP -
  ENDIF
  R> MOD ;
```

Now we use the MODULUS routine to keep the ROW and COL values within valid screen limits. (see if you can figure out why we didn't need MODULUS in the ->COL word)

```
: ->ROW. ( row - ) 24 MODULUS -> ROW ;
: ->COL ( col - ) 31 AND -> COL ;
```

To actually place the box on the screen compute the offset from the start of the screen and output it directly to the video ram (VDP for those of you who like jargon). Likewise we can determine the current contents of the ROW and COL position by reading VDP at the computed offset. This gives our little box creature eyes, so to speak.

```
: SCR. ( - addr ) ROW 32 * COL + ;
: ->SCR ( char - ) SCR. C!VDP ;
: SCR-> ( - char ) SCR. C@VDP ;
```

While we are at it, why not allow him a reverse gear? We do this by reversing his row and column direction.

```
: REVERSE_DIRECTION
  +ROW MINUS -> +ROW
  +COL MINUS -> +COL ;
```

To turn right, just jiggle the directions a bit and voilà. (Note that we could have defined REVERSE_DIRECTION as two consecutive TURN RIGHTS. Why didn't I think of that?)

```
: TURN_RIGHT
  +COL >R
  +ROW MINUS -> +COL
  R> -> +ROW ;
```

Here's where we tell the box how to move. Go straight ahead one position unless a non blank position is encountered, in which case, backup and turn right. What could be simpler?

```
: PROCEED
  ADVANCE
  SCR-> BL =
  IF ( not yet filled with a box )
    0 -> TURNS
    BOX ->SCR
  ELSE
    ( backup to previous position )
    ( and turn to the right. )
    REVERSE_DIRECTION ADVANCE
    REVERSE_DIRECTION TURN RIGHT
    TURNS 1+ -> TURNS
  ENDIF ;
```

Position the box in the top left hand corner facing down. Give him his walking papers and off he goes!

```
: WALK
  CLS
  0 -> ROW 0 -> +ROW
  0 -> COL 1 -> +COL
  BEGIN
    PROCEED
    TURNS 4 =
  UNTIL ( no way to proceed ) ;
```

As a challenge to our BASIC brothers, I'd be interested in seeing the above example coded in BASIC (preferably changing the sex of the box to prevent charges of chauvinism). We could then compare the size and speed of comparable programs. Any takers??.

TIL (as in Threaded Interpreted Language) the next time...

The L.A.99ers are happy to announce that
issue No. 6 has been compiled. Below is the
table of contents.....Chick De Marti

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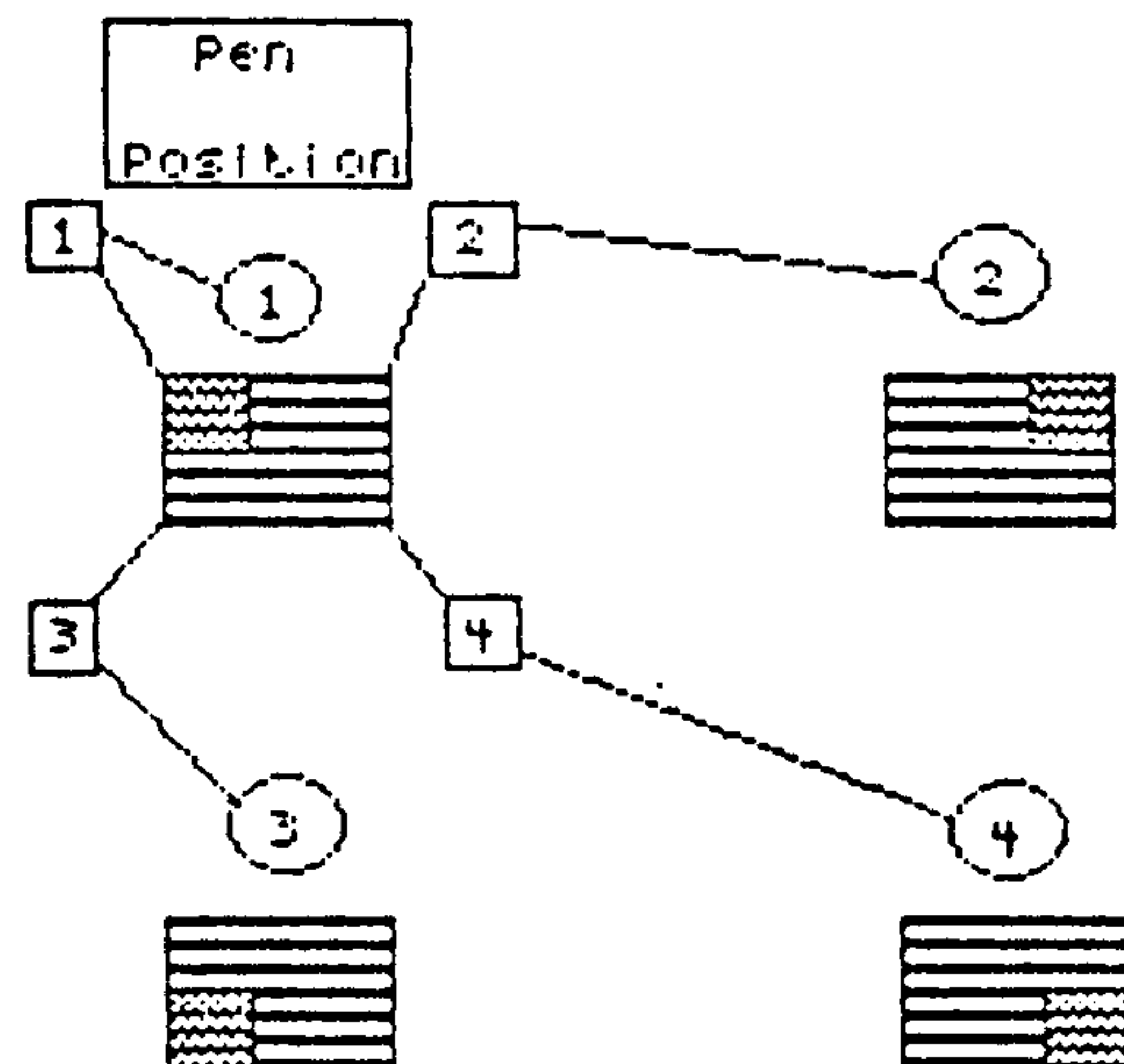
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Page 10	"THE FORTH COLUMN" (I'll try to have the entire Prog. in the next issue!)	by GEORGE SLOAN of the ALOHA U.G.
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* * * * *

Flip and Mirror With TI-ARTIST
By Beverly Cook

Here's a little tip on a very obscure feature of TI-ARTIST. This feature is mentioned briefly and without much explanation. To flip or mirror a picture or instance, select either the MOVE WITHOUT COLOR or COPY WITHOUT COLOR feature from the enhancement. Position the pen at one of the corners (as shown below) and completely surround the picture with a box. Press the fire button and the picture will be picked up. If you're happy with the position of it, press the fire button again and the picture will be dropped, but it will be in the direction you wanted the change made. It's a bit confusing, but try it a time or two and you'll see how it works.



Thanks
BREVARD U.G.

ONE LINERS

by Tony Falco

One liners are an exercise which develop programming skill. By their obvious limitation in size they must be compact and efficient. The three one liners which follow all have to do with the number pi. That elusive, non-ending, non-repeating decimal which approximates the ratio of the circumference to the diameter of any circle.

The first one does low resolution graphics designs. The designs are in reality plots of graphs of polar functions. Complete execution of the program takes about 22 minutes.

The second one approximates pi by randomly tossing imaginary "darts" at a square which has a circle inscribed in it. The darts always land in the square, and by counting how many end up inside the circle we can calculate pi because the probability of a dart hitting inside the circle is pi divided by four. After each 20 tosses the program reports the number of tosses and the approximate value of pi. The longer it runs the better the approximation. The program is stopped by using FCTN-4.

The last program starts by considering a regular hexagon (six equal sides and six equal angles). We use its perimeter as an approximation for the circle's circumference. We then repeat this process (that is we calculate the perimeter) for 12 sides, 24 sides, 48 sides and so forth doubling the number of sides each time and stopping when the number of sides reaches 6,144. (That's pretty close to a circle.) Try this one on another brand of computer and compare the value obtained with the actual value of pi. You will see how accurate your T.I. is compared to other machines.

(Courtesy of
M U N C H
Newsletter)

```
1. CALL SCREEN(2):: FOR P=3 TO 30 :: CALL
  CLEAR :: CALL COLOR(2,P/2+1,1):: FOR A=
0 TO 5*PI STEP PI/36 :: R=11*SIN(P*A/2):
: CALL HCHAR(12-R*SIN(A),17+R*COS(A),42)
:: NEXT A :: NEXT P
```

```
1 N=N+1 :: RANDOMIZE :: X=RND :: Y=RND :
: H=H-(X*X+Y*Y<=1):: IF N/20=INT(N/20)TH
EN PRINT "TOSSES=";N;"PI=";4*H/N:: G
OTO 1 ELSE 1
```

```
1 CALL CLEAR :: PRINT "# OF SIDES","PI",
: :: N=6 :: S=1 :: FOR X=1 TO 11 :: PRI
NT N,S*N/2 :: N=2*N :: S=SQR(2-SQR(4-S*S
)):: NEXT X
```

LA/99 NEW LIBRARY ADDS FOR MARCH

0677 CALENDAR #4 \$1.00 Disk not included. X/B Prints small Calendar for any years, plus interested facts about your birthday. (20)

4117 DISK UTILITIES \$2.00 Freeware by John Birdwell provides the user with the means to study how data is stored on disk. Good for changing, editing the data to suit your purpose. Compare Disks, Print Sectors, Edit Sectors, Find String, Disk Report, Directory, Printer Setup, Screen Color, Compare Files, Print files, Edit files, and many more operations. (SSSD)211

4118 SCREEN IMAGE \$2.00 Freeware by T McGovern - Many great programs. Reconfigure, Multi-File, TI-Writer File, Speech, Directory, Header, Reformat, Rem/Sub Space, 4/A Quarta, Page Pause, 1-4 Column, 28/56 Characters, File Review, File Delete, Lower Case. (SSSD)183

4119 KAZCO-WARE \$2.00 Freeware by Ray Kaxmer - basic or X-B -5 Games for the youth CANNONBALL CHESS, SHOOSH, JACKS, TEXAS RANGER, FOREST FIRE- A Music Demo, Sprites in Basic and Tiny Tips. (SSSD)360

BUSINESS

PROFESSIONAL

PRICES ARE MARKED AND INCLUDES DISK. Include \$1.00 for every TWO disks MAILED. I will be putting your ordered on SSSD disks (flippies) That will = 4 BUSINESS DISK PROGRAMS being mailed for \$1.00. Number following (SSSD) are sectors used on disk.

2201 BUSINESS #1 \$5.00 25 Business type programs from AMNION. -FINANCIAL MATH, FACTORIAL INTEGER, RECEIPT EXPENSE, DERIVATIVE OF FUNCTION, LINEAR REGRESSION, NUMBER CONVERSION, ADDRESSES, CHECKBOOK, ESTATE, STOCK RECORD, SANDWICH SHOP, STOCK TREND AND REPORTS, THERMAL PRINTER TEST, HAM FILE, P.E.R.T., C.P.M., AUTO EXPENSE, HANDICAPPER, WORD PROCESSING, ALL ABOUT LOANS, CONVERSIONS, CHECK SORT, SORT, AMORTIZATION SCHEDULE, ANNUITIES, CONVENTION LOAN ANALYSIS, HOUSE INVENTORY (SSSD)356

2202 BUSINESS #2 \$5.00 23 BUSINESS TYPE PROGRAMS FROM AMNION - DEPRECIATION, HOUSE COST, INSTALLMENT PAYMENTS, STOCK TRANSACTIONS, CHECKBOOK BALANCE, LOG, RECORDS, CHISQARE, INTEREST PROJECTOR, 1040 FORM, ALPHA NUMERIC, CHRISTMAS LIST, COMPARE, COMPARE PRINTER, DECISIONS, DEDUCTIONS, DIRECTORY, INCOME AVEING, INVESTMENT VALUE, INVEST, MEDICAL EXPENSE, PULMONARY TEST, HOME BUDGETING, FIZZY DECISION MAKING. (SSSD)345

2203 BUSINESS #3 \$5.00 22 Business programs from AMNION -LIFE EXPECTANCY, SIMULTANEOUS EQUATIONS, FINANCIAL PLANNING HELPS, FLIGHT PLAN, MASTER INDEX, PAY, THE CHURCH TREASUER, RECORD FILE, TREND LINE ANALYSIS, PRINT RIGHT, INTEREST PROJECTOR, REGRESSION, LOAN TREND ANALYSIS, EMPLOYEE PAY CHECK, STATEMENT ANALYSIS, OPERATIONAL COST, COSTING, FINANCIAL RATIO, INVESTMENT CALCULATOR, GENERAL INVENTORY, BREAK EVEN, COLUMNAR PAD. (SSSD)352

2204 BUSINESS #4 \$5.00 17 Business programs from AMNION -BARGRAPHER II, STOCK COMMISSION, THE INVESTOR, THE BILLER, BID PROJECTOR, COST EFFECTOR, RAFFLE TICKET PRINTER, INTEREST/DEPRECIATION SCHEDULE, INVESTMENT COUNSELOR, THE TAXMAN, ITEMITED DEDUCTION WORKSHEET, FINANCIAL WORKSHEET, PERSONAL BANKER, PAYROLL CLERK, FINANCIAL HEALTH, ACCOUNTS FILE, AUTHORITY FOR EXPENDITURE. (SSSD)353

2205 BUSINESS #5 \$5.00 14 Business type programs from AMNION
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LIGHTING FACTORS, AUTO GRAPHS, PORTFOLIO ANALYSIS, THE LAST HOUR,
STOCK LISTER, COMPOUND INTEREST WORKSHEET. (SSSD)350

2206 BUSINESS #6 \$5.00 18 Business type programs from AMNION
-WORD PROCESSOR, TEST SCORE ANALYZER, LOAN CALCULATOR,
STOCK PRICES MOVING AVERAGES, CASH ASSETS, TIME PAYMENT COMPARATOR,
PRESSURE VALUE DESIGN, ESTIMATED TAX ANALYSIS, TEXT EDITOR,
GRADE POINT AVERAGER, LOAN PACKAGE, THE FARMER, PLOT AND SAVE,
CROP MASTER, BUSINESS FORECASTING, CHECK LEDGER, COST CALC,
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2207 BUSINESS #7 \$5.00 15 Business type programs from AMNION
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TRAVEL EXPENSES, LAMB SCORING, WEAVING CALCULATOR,
STUDENT SCORING SYSTEM, MESSAGE GRAPHS, BONDS. (SSSD)341

2208 BUSINESS #8 \$5.00 8 Business type programs from AMNION
-BAR GRAPH II, LEARNING CURVE, FOREIGN CURRENCY EXCHANGE,
SALES ANALYSIS PROGRAM, STAGECOACH PROBLEM, STOCK MARKET, FINANCE.
(SSSD)348

2209 BUSINESS #9 \$5.00 17 Business type programs from the LA99
Library- ANNUITIES, AUTO EXPENSE, INCOME AVERAGING, FINANCIAL MATH,
CHECKBOOK #1, CHECKBOOK #2, CHECKBOOK SORT, DOC'S BILLING,
RECEIPT EXPENSE #1, EXPENSE REPORT, INVEST, LOAD ANALYSIS, PAY CHART #1,
PAY CHART #2, STATEMENT, STOCK RECORD PRK, STOCKS #1. (SSSD)351

2210 BUSINESS #10 \$5.00 15 Business type programs from the LA99
Library- ACCOUNTS RECEIVABLE, AMORTIZATION, PERSONAL BANKER,
FINANCIAL PLAN, CHECKBOOK #2, CHECKBOOK RECONCILE, DEPRCIATION, ESTATE,
INTEREST PROJECT, IRA COMPARISION, LOANS, P.E.R.T, PORTFOLIO,
STOCKS RECORDS. (SSSD)285

4024 CHECKBOOK AND BUDGET MANGER \$2.00 freeware by John Taylor. An
extremely effective program for both checkbook and budget maintenance.
Analyze your spending habits. (SSSD) 357

4044 EE BONDMASTER \$2.00 Freeware by Real estate Projection. Keep
track of up to 100 EE BONDS. Calculates and prints interest years and
tax info. (SSSD)137

4114 TAX 1986 \$4.00 Freeware by James Sleeth. Uses Multiplan to print
1986 Federal and State income on Federal and State form. 2(SSSD) 681.

4115 RECORD PLUS \$2.00 Freeware by Steve Risner. A data base X/B
program which allows custom printing/lists/labels, sorting, full screen
editing and many more features. Let your "imagination" be your guide.
(SSSD)360.

4116 INVOICE \$2.00 Freeware by David Belanger. A X/B program which
keeps an invoice of charges and credits with balance. Program will
print and save to disk spreadsheet type results. (SSSD)133

LIBRARIAN FRED MOORE 7730 EMERSON AVE. LOS ANGELES, CA 90045

MARKETPLACE

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(the marketplace is a fund raiser for the club, that is, the "profit" goes to maintain the quality of this Newsletter. In general the price listed splits the difference between cost and retail. Please help your Club.)

MILLERS GRAPHICS

DISKASSEMBLER		18.50
ORPHAN CHRONICLES (priceless)		9.95
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EXPLORER	ALL	GONE
NIGHT MISSION		18.50
GRAM KRACKER (80K EXPANDED)	ALL	GONE
GK UTILITY I		10.00
SMART PROGRAMMING FOR SPRITES		6.25

NEW RELEASES

PRE-SCAN IT! (J. PETER HODDIE)		10.00
GRAM PACKER	"	10.00
FONT WRITER	"	19.00
PRINTER'S APPRENTICE (M. McCANN)		19.00

MYARC

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D/D DISK CONTROLLER		155.00
128K RAM DISK/SPOOLER		175.00
512K RAM DISK/SPOOLER		280.00
EXTENDED BASIC II LEVEL IV		80.00
128K RAM DISK W/XBASIC II		235.00
512K RAM DISK W/XBASIC II		340.00

INSCEBOT

TI-ARTIST		15.00
DISPLAY MASTER		12.00
ARTIST EXTRAS		6.00

MEGATRONICS

EXTENDED BASIC II PLUS		72.50
INTERN (BOOK ON GPL)		16.50
128K GRAM CARD		227.50

HARDWARE & SUPPLIES

TEAC 55BV DSDD DRIVES		90.00
DISKETTES DSDD		.50
64K EPSON INT. PRINT BUFFER		45.00
COLOR RIBBONS (EPSON)		4.00

BACK ISSUES

SUPER 99 MONTHLY		1.25
MICROPENDIUM		1.25
SMART PROGRAMMER JUNE 1986		1.50

BEST OF NEWSLETTERS W/DISK		5.00
FORTH NOTES VOL 1-5 (2.50 EA)		10.00
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ASSEMBLY NOTES VOL 1		2.50
TECHNICAL AND BUSINESS BOOKS		5.00
SAMS BOOKS (VARIOUS)		5.00
SAMS BOOKS WITH CASSETTES		7.50

(please send your order to the CLUB address, not the Librarian, and add \$1.00 per disk for postage and handling. CA residents add 6.5% tax).

ANNOUNCEMENT

March 19, 1987

Dear Readers,

It's 99'FEST-WEST time again! The dates for this year are May 16 & 17, 1987, again in conjunction with the Computer Sellathon at the Shrine Exposition Hall in Los Angeles. ALL OF OUR OUT-OF-TOWN READERS, AS WELL AS MEMBERS IN THE L.A. AREA ARE INVITED!!! Last year's FEST was quite successful, especially in light of the fact that it was our first venture into the TI Faire domain. We had many vendors and quite a respectable crowd, and most enjoyed the ability to see more computer products on the main floor of the Shrine.

We all had a rewarding and enjoyable time last year. Most of the out-of-towners stayed in the same motel and the hospitality room there was WELL used as many of our local members joined in on the fun, at ALL hours of the day.

Last year a discount coupon was distributed for a dollar off on the admission. This year the promoter has lowered the admission price for all, so instead we will be having a raffle for all TI ticket holders. The only way you can be identified as a TI user is to use the raffle ticket reproduced below at the time you purchase your ticket, which will be \$5.00 for both days. As many copies may be made of this ticket as you wish.

If you have questions please call Terrie at 213-271-6930 or Tom at 213-454-1943, or write to us.

PLEASE COME AND ENJOY THE FUN!

Tom Freeman, President
Terrie Masters, Vice-President
LA 99'er Computer Group

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INTRODUCING

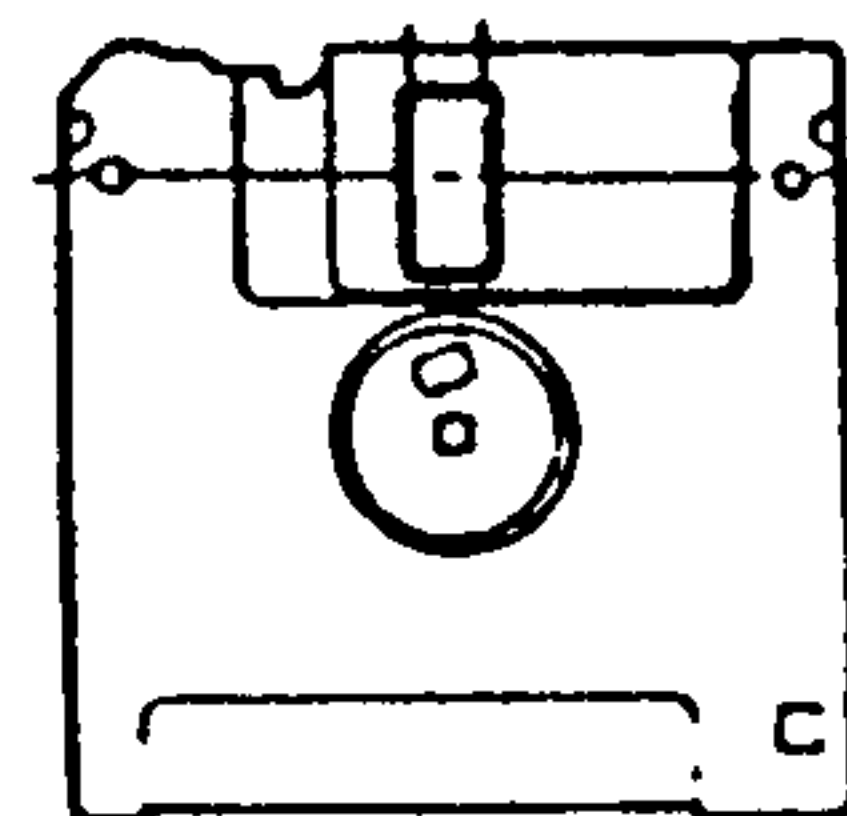
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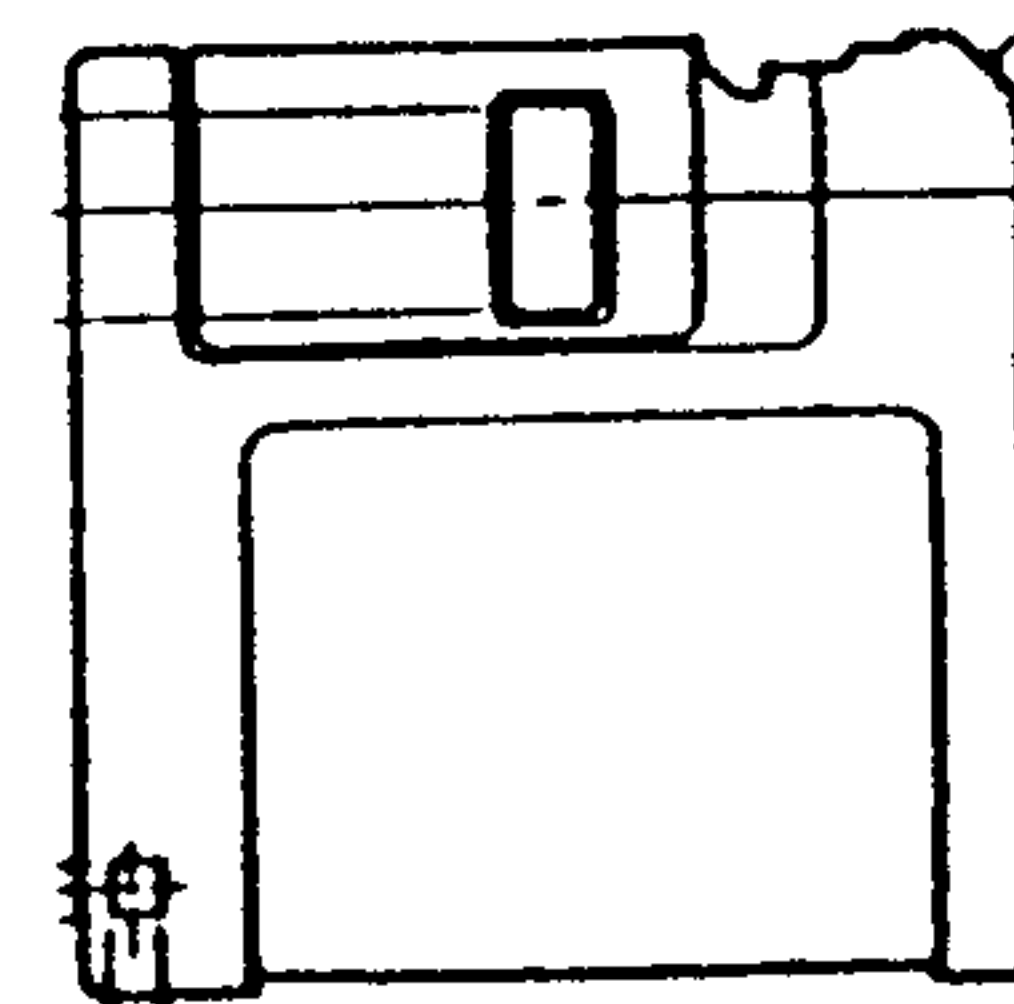
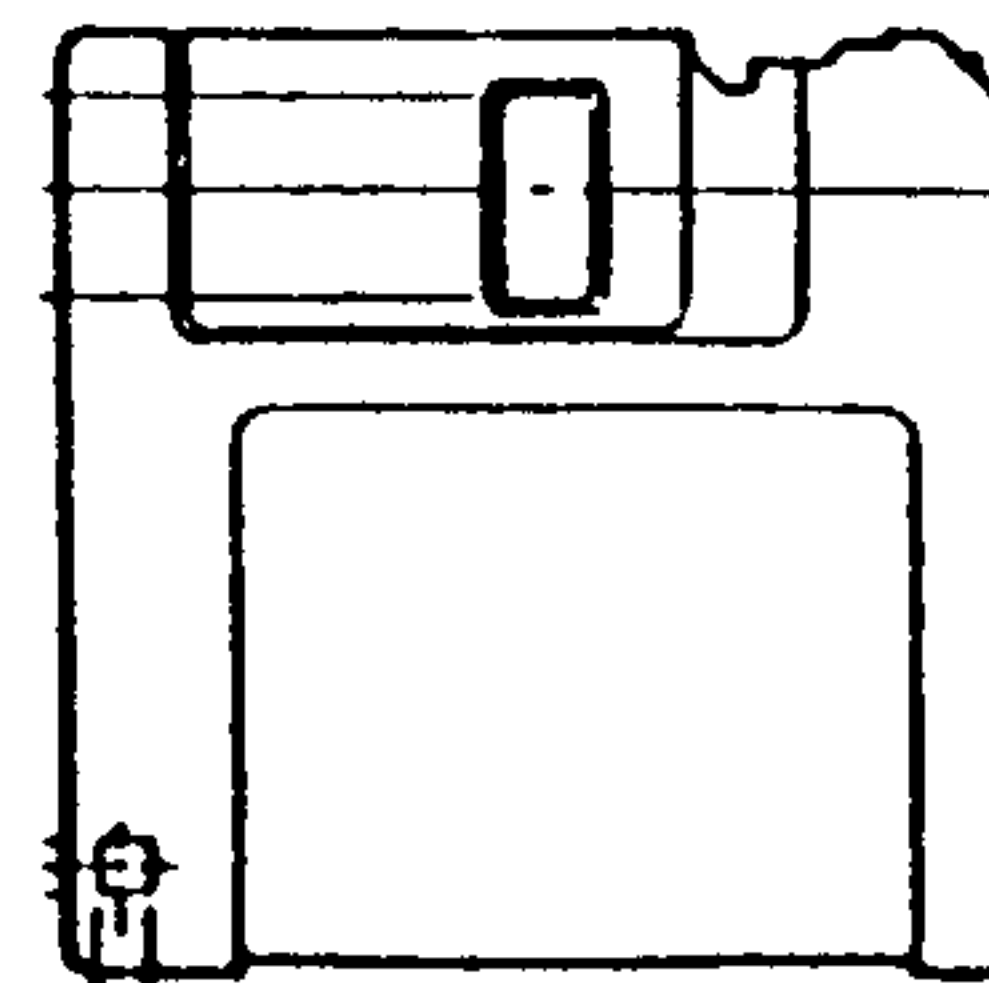
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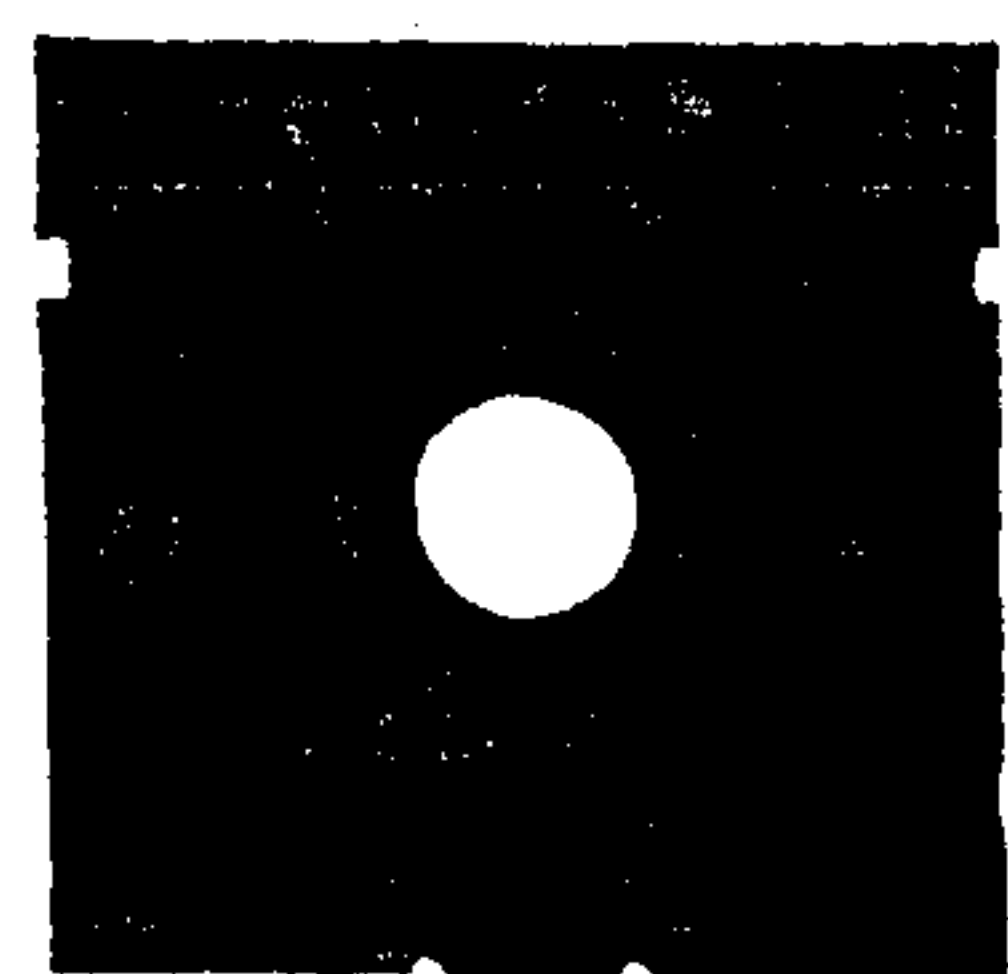
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To: 99'FEST-WEST'87 Vendors and Visitors
From: LA 99er Computer Group

The second annual FEST plans are now firming. Based on last year's experience, prospects look great. We should have vendors and visitors from all parts of the country. Here are the details:

The DATE: May 16 & 17, 1987 (Saturday and Sunday)

The LOCATION: Shrine Exposition Hall, 700 W. 32nd St., Los Angeles

The TIME: 10 AM to 5 PM both days

We are again hosting the FEST in conjunction with the Computer Sellathon held several times yearly at the Shrine. This was a very popular combination last year as it afforded everyone the opportunity to see what else was available and compatible in the computer world. For instance, there were many bargains in hardware not specific to the TI on the main level.

Booths for vendors will be \$100 (one third the cost of the booths downstairs). Set-up times for vendors will be from 7-9 AM on Saturday. Tickets for guests will be \$6 at the door, with a \$1 discount coupon to be published in our newsletter and uploaded to networks in the near future (it may also be freely duplicated). The ticket is good for both days.

The MOTEL: Vagabond Inn, 3101 S. Figueroa, Los Angeles. We are holding a block of rooms at this location, which is only one block from the Shrine. The room rates are \$48 per room (not per person) sharing permitted. Beds are Queen-size, rollaways for children free. A few rooms have two beds. I need your arrival and departure date, and a credit card number to hold the room. The motel will have a Hospitality Room, open all of the weekend except during the actual FEST hours. Last year we did a lot of serious conversing and had a lot of fun in that room! We will do our best to see that ALL out of town visitors have a good time during their entire stay in Los Angeles, not just while at the show.

The SHUTTLE: Flight Line or Super Shuttle have direct service from LAX to the motel, with reasonable rates, call direct from the airport. Some of us will also be doing airport duty, if possible. If we know your arrival time we will do what we can - certainly we will be able to deliver you back to the airport.

The FOOD: The Vagabond has a Restaurant and Coffee Shop adjacent, last year we took over at least half of it, and they loved us! The food was reasonable in cost and quality. There is also one of almost every fast food chain known nearby!

The REST: If you have time, or are bringing families, there is of course much to do in Los Angeles. In fact there are many interesting places within walking distance of the Motel, including Exposition Park with great museums and an IMAX theater, and a gold exhibit at the Natural History Museum.

The CONFLICT: We are aware that our FEST conflicts with that being held by the Ottawa group, for which we are truly SORRY, but our dates were constrained by the conjunction with the Shrine sellathon. If any of you are planning to go to Ottawa, perhaps you could send a co-worker or family member to represent you. We will be happy to provide assistance at this end of course.

The WHO: If you have any questions, please feel free to call or write Terrie Masters, 148 S. Maple Dr., Beverly Hills, CA 90212, 213-271-6930.

Tom Freeman, President
Terrie Masters, Vice-President

REMEMBER: THE INCREDIBLY LOW AIRLINE FARES ARE GOOD UNTIL MAY 20!